

Human GPR56-1:	Met Thr Pro Gln Ser Leu Leu Gln Thr Thr Leu Phe Leu Ser Leu Ser Leu	15
Human GPR56-2:	Met Thr Pro Gln Ser Leu Leu Gln Thr Thr Leu Phe Leu Ser Leu Ser Leu	
Human GPR56-3:	Met Thr Pro Gln Ser Leu Leu Gln Thr Thr Leu Phe Leu Ser Leu Ser Leu	
Human GPR56-4:	Met Thr Pro Gln Ser Leu Leu Gln Thr Thr Leu Phe Leu Ser Leu Ser Leu	
Murine GPR56:	Met <b>Ala Val</b> Gln Gln <b>Arg</b> Gln <b>Met Val Tyr</b> Phe Phe Leu Ser Leu	10 15
	1	
Human GPR56-1:	Leu Phe Leu Val Gln Gly Ala His Gly Arg Gly His Arg Glu Asp Phe	
Human GPR56-2:	Leu Phe Leu Val Gln Gly Ala His Gly Arg Gly His Arg Glu Asp Phe	
Human GPR56-3:	Leu Phe Leu Val Gln Gly Ala His Gly Arg Gly His Arg Glu Asp Phe	
Human GPR56-4:	Leu Phe Leu Val Gln Gly Ala His Gly Arg Gly His Arg Glu Asp Phe	
Murine GPR56:	<b>Phe Ser</b> Leu Val Gln Gly Ala His <b>Ser Gly Ser Pro</b> Arg Glu Asp Phe	20 25 30
Human GPR56-1:	Arg Phe Cys Ser Gln Arg Asn Gln Thr His Arg Ser Ser Leu His Tyr	
Human GPR56-2:	Arg Phe Cys Ser Gln Arg Asn Gln Thr His Arg Ser Ser Leu His Tyr	
Human GPR56-3:	Arg Phe Cys Ser Gln Arg Asn Gln Thr His Arg Ser Ser Leu His Tyr	
Human GPR56-4:	Arg Phe Cys Ser Gln Arg Asn Gln Thr His Arg Ser Ser Leu His Tyr	
Murine GPR56:	Arg Phe Cys <b>Gly</b> Gln Arg Asn Gln Thr <b>Gln Gln</b> Ser <b>Thr</b> Leu His Tyr	35 40 45
Human GPR56-1:	Lys Pro Thr Pro Asp Leu Arg Ile Ser Ile Glu Asn Ser Glu Glu Ala	
Human GPR56-2:	Lys Pro Thr Pro Asp Leu Arg Ile Ser Ile Glu Asn Ser Glu Glu Ala	
Human GPR56-3:	Lys Pro Thr Pro Asp Leu Arg Ile Ser Ile Glu Asn Ser Glu Glu Ala	
Human GPR56-4:	Lys Pro Thr Pro Asp Leu Arg Ile Ser Ile Glu Asn Ser Glu Glu Ala	
Murine GPR56:	<b>Asp Gln Ser Ser Glu Pro His Ile Phe Val Trp Asn Thr</b> Glu Glu <b>Thr</b>	50 55 60

FIGURE 1a

Human GPR56-1: Leu Thr Val His Ala Pro Phe Pro Ala Ala His Pro Ala Ser Arg Ser  
Human GPR56-2: Leu Thr Val His Ala Pro Phe Pro Ala Ala His Pro Ala Ser Arg Ser  
Human GPR56-3: Leu Thr Val His Ala Pro Phe Pro Ala Ala His Pro Ala Ser Arg Ser  
Human GPR56-4: Leu Thr Val His Ala Pro Phe Pro Ala Ala His Pro Ala Ser Arg Ser  
Murine GPR56: Leu Thr **Ile Arg** Ala Pro Phe **Leu** Ala Ala **Pro Asp Ile Pro Arg Phe** 80  
65 70 75 80

Human GPR56-1: Phe Pro Asp Pro Arg Gly Leu Tyr His Phe Cys Leu Tyr Trp Asn Arg  
Human GPR56-2: Phe Pro Asp Pro Arg Gly Leu Tyr His Phe Cys Leu Tyr Trp Asn Arg  
Human GPR56-3: Phe Pro Asp Pro Arg Gly Leu Tyr His Phe Cys Leu Tyr Trp Asn Arg  
Human GPR56-4: Phe Pro Asp Pro Arg Gly Leu Tyr His Phe Cys Leu Tyr Trp **Ser Arg**  
Murine GPR56: Phe Pro **Glu** Pro Arg Gly Leu Tyr His Phe Cys Leu Tyr Trp **Ser Arg** 95  
85 90 95

Human GPR56-1: His Ala Gly Arg Leu His Leu Leu Tyr Gly Lys Arg Asp Phe Leu Leu  
Human GPR56-2: His Ala Gly Arg Leu His Leu Leu Tyr Gly Lys Arg Asp Phe Leu Leu  
Human GPR56-3: His Ala Gly Arg Leu His Leu Leu Tyr Gly Lys Arg Asp Phe Leu Leu  
Human GPR56-4: His Ala Gly Arg Leu His Leu Leu Tyr Gly Lys Arg Asp Phe Leu Leu  
Murine GPR56: His **Thr** Gly Arg Leu His Leu **Arg** Tyr Gly Lys His Asp **Tyr** Leu Leu  
100 110

Human GPR56-1: Ser Asp Lys Ala Ser Ser Leu Leu Cys Phe Gln His Gln Glu Ser  
Human GPR56-2: Ser Asp Lys Ala Ser Ser Leu Leu Cys Phe Gln His Gln Glu Ser  
Human GPR56-3: Ser Asp Lys Ala Ser Ser Leu Leu Cys Phe Gln His Gln Glu Ser  
Human GPR56-4: Ser Asp Lys Ala Ser Ser Leu Leu Cys Phe Gln His Gln Glu Ser  
Murine GPR56: Ser **Ser Gln** Ala Ser **Arg** Leu Leu Cys Phe Gln **Lys** Gln Glu **Gln** Ser  
115 120 125

FIGURE 1b

Human GPR56-1:	Leu	Ala	Gln	Gly	Pro	Pro	Leu	Leu	Ala	Thr	Ser	Val	Thr	Ser	Trp	Trp	Gln
Human GPR56-2:	Leu	Ala	Gln	Gly	Pro	Pro	Leu	Leu	Ala	Thr	Ser	Val	Thr	Ser	Trp	Trp	Gln
Human GPR56-3:	Leu	Ala	Gln	Gly	Pro	Pro	Leu	Leu	Ala	Thr	Ser	Val	Thr	Ser	Trp	Trp	Gln
Human GPR56-4:	Leu	Ala	Gln	Gly	Pro	Pro	Leu	Leu	Ala	Thr	Ser	Val	Thr	Ser	Trp	Trp	Gln
Murine GPR56:	Leu	<b>Lys</b>	Gln	Gly	<b>Ala</b>	Pro	Leu	<b>Ile</b>	Ala	Thr	Ser	Val	<b>Ser</b>	Ser	Trp	Trp	<b>Gln</b>
																	140
																	135
																	130
Human GPR56-1:	Ser	Pro	Gln	Asn	Ile	Ser	Leu	Pro	Ser	Ala	Ala	Ser	Phe	Thr	Phe	Ser	
Human GPR56-2:	Ser	Pro	Gln	Asn	Ile	Ser	Leu	Pro	Ser	Ala	Ala	Ser	Phe	Thr	Phe	Ser	
Human GPR56-3:	Ser	Pro	Gln	Asn	Ile	Ser	Leu	Pro	Ser	Ala	Ala	Ser	Phe	Thr	Phe	Ser	
Human GPR56-4:	Ser	Pro	Gln	Asn	Ile	Ser	Leu	Pro	Ser	Ala	Ala	Ser	Phe	Thr	Phe	Ser	
Murine GPR56:	<b>Ile</b>	Pro	Gln	Asn	<b>Thr</b>	Ser	Leu	Pro	<b>Gly</b>	Ala	<b>Pro</b>	Ser	Phe	<b>Ile</b>	Phe	Ser	160
																	155
																	150
																	145
Human GPR56-1:	Phe	His	Ser	Pro	Pro	His	Thr	Ala	Ala	His	Asn	Ala	Ser	Val	Asp	Met	
Human GPR56-2:	Phe	His	Ser	Pro	Pro	His	Thr	Ala	Ala	His	Asn	Ala	Ser	Val	Asp	Met	
Human GPR56-3:	Phe	His	Ser	Pro	Pro	His	Thr	Ala	Ala	His	Asn	Ala	Ser	Val	Asp	Met	
Human GPR56-4:	Phe	His	Ser	Pro	Pro	His	Thr	Ala	Ala	His	Asn	Ala	Ser	Val	Asp	Met	
Murine GPR56:	Phe	His	<b>Asn</b>	<b>Ala</b>	Pro	His	<b>Lys</b>	<b>Val</b>	<b>Ser</b>	His	Asn	Ala	Ser	Val	Asp	Met	175
																	170
																	165
Human GPR56-1:	Cys	Glu	Leu	Lys	Arg	Asp	Leu	Gln	Leu	Ser	Gln	Phe	Leu	Lys	His		
Human GPR56-2:	Cys	Glu	Leu	Lys	Arg	Asp	Leu	Gln	Leu	Ser	Gln	Phe	Leu	Lys	His		
Human GPR56-3:	Cys	Glu	Leu	Lys	Arg	Asp	Leu	Gln	Leu	Ser	Gln	Phe	Leu	Lys	His		
Human GPR56-4:	Cys	Glu	Leu	Lys	Arg	Asp	Leu	Gln	Leu	Ser	Gln	Phe	Leu	Lys	His		
Murine GPR56:	Cys	<b>Asp</b>	Leu	Lys	<b>Lys</b>	<b>Glu</b>	Leu	Gln	<b>Gln</b>	Ser	<b>Arg</b>	<b>Tyr</b>	Leu	<b>Gln</b>	His		190
																	185
																	180

FIGURE 1c

Human GPR56-1: Pro Gln Lys Ala Ser Arg Arg Pro Ser Ala Ala Pro Ala Ser Gln Gln  
 Human GPR56-2: Pro Gln Lys Ala Ser Arg Arg Pro Ser Ala Ala Pro Ala Ser Gln Gln  
 Human GPR56-3: Pro Gln Lys Ala Ser Arg Arg Pro Ser Ala Ala Pro Ala Ser Gln Gln  
 Human GPR56-4: Pro Gln Lys Ala Ser Arg Arg Pro **Thr** Ala Ala **Phe** Ile Ser Gln Gln  
 Murine GPR56: Pro Gln Lys Ala **Ala** Lys Arg **Pro** 195  
 205  
 Human GPR56-1: Leu Gln Ser Leu Glu Ser Lys Leu Thr Ser Val Arg Phe Met Gly Asp  
 Human GPR56-2: Leu Gln Ser Leu Glu Ser Lys Leu Thr Ser Val Arg Phe Met Gly Asp  
 Human GPR56-3: Leu Gln Ser Leu Glu Ser Lys Leu Thr Ser Val Arg Phe Met Gly Asp  
 Human GPR56-4: Leu Gln Ser Leu Glu Ser Lys Leu Thr Ser Val Arg Phe Met Gly Asp  
 Murine GPR56: Leu Gln Ser Leu Glu Ser Lys Leu Thr Ser Val **Ser** Phe **Leu** Gly Asp  
 210 215 220  
 Human GPR56-1: Met Val Ser Phe Glu Glu Asp Arg Ile Asn Ala Thr Val Trp Lys Leu  
 Human GPR56-2: Met Val Ser Phe Glu Glu Asp Arg Ile Asn Ala Thr Val Trp Lys Leu  
 Human GPR56-3: Met Val Ser Phe Glu Glu Asp Arg Ile Asn Ala Thr Val Trp Lys Leu  
 Human GPR56-4: Met Val Ser Phe Glu Glu Asp Arg Ile Asn Ala Thr Val Trp Lys Leu  
 Murine GPR56: **Thr** **Leu** Ser Phe Glu Glu Asp Arg **Val** Asn Ala Thr Val Trp Lys Leu  
 225 230 235  
 Human GPR56-1: Gln Pro Thr Ala Gly Leu Gln Asp Leu His Ile His Ser Arg Gln Glu  
 Human GPR56-2: Gln Pro Thr Ala Gly Leu Gln Asp Leu His Ile His Ser Arg Gln Glu  
 Human GPR56-3: Gln Pro Thr Ala Gly Leu Gln Asp Leu His Ile His Ser Arg Gln Glu  
 Human GPR56-4: Gln Pro Thr Ala Gly Leu Gln Asp Leu His Ile His Ser Arg Gln Glu  
 Murine GPR56: **Pro** Pro Thr Ala Gly Leu Glu Asp Leu His Ile His Ser **Gln** Lys Glu  
 245 250 255

FIGURE 1d

Human GPR56-1: Glu Glu Gln Ser Glu Ile Met Glu Tyr Ser Val Leu Leu Pro Arg Thr  
 Human GPR56-2: Glu Glu Gln Ser Glu Ile Met Glu Tyr Ser Val Leu Leu Pro Arg Thr  
 Human GPR56-3: Glu Glu Gln Ser Glu Ile Met Glu Tyr Ser Val Leu Leu Pro Arg Thr  
 Human GPR56-4: Glu Glu Gln Ser Glu Ile Met Glu Tyr Ser Leu Leu Pro Arg Ala  
 Murine GPR56: Glu Glu Gln Ser Glu **Val Gln Ala** Tyr Ser **Leu** Leu Leu Pro Arg **Arg** 270  
 260

Human GPR56-1: Leu Phe Gln Arg Thr Lys Gly Arg Ser Gly Glu Ala Glu Lys Arg Leu  
 Human GPR56-2: Leu Phe Gln Arg Thr Lys Gly Arg Ser Gly Glu Ala Glu Lys Arg Leu  
 Human GPR56-3: Leu Phe Gln Arg Thr Lys Gly Arg Ser Gly Glu Ala Glu Lys Arg Leu  
 Human GPR56-4: Leu Phe Gln Arg Thr Lys Gly Arg Ser Gly Glu Ala Glu Lys Arg Leu  
 Murine GPR56: Val Phe Gln Gln Thr Arg Gly Arg Arg Asp Ala Lys Arg Leu 285  
 275 280

Human GPR56-1: Leu Leu Val Asp Phe Ser Ser Gln Ala Leu Phe Gln Asp Lys Asn Ser  
 Human GPR56-2: Leu Leu Val Asp Phe Ser Ser Gln Ala Leu Phe Gln Asp Lys Asn Ser  
 Human GPR56-3: Leu Leu Val Asp Phe Ser Ser Gln Ala Leu Phe Gln Asp Lys Asn Ser  
 Human GPR56-4: Leu Leu Val Asp Phe Ser Ser Gln Ala Leu Phe Gln Asp Lys Asn Ser  
 Murine GPR56: Leu Val Val Asp Phe Ser Ser Gln Ala Leu Phe Gln Asp Lys Asn Ser  
 290 295 300

Human GPR56-1: Ser Gln Val Leu Gly Glu Lys Val Leu Gly Ile Val Val Gln Asn Thr  
 Human GPR56-2: Ser **His** Val Leu Gly Glu Lys Val Leu Gly Ile Val Val Gln Asn Thr  
 Human GPR56-3: Ser Gln Val Leu Gly Glu Lys Val Leu Gly Ile Val Val Gln Asn Thr  
 Human GPR56-4: Ser Gln Val Leu Gly Glu Lys Val Leu Gly Ile Val Val Gln Asn Thr  
 Murine GPR56: Ser Gln Val Leu Gly Glu Lys Val Leu Gly Ile Val Val Gln Asn Thr  
 305 310 315 320

FIGURE 1e

6/15

Human GPR56-1:	Lys Val Ala Asn Leu Thr Glu Pro Val Val Leu Thr Phe Gln His Gln	335
Human GPR56-2:	Lys Val Ala Asn Leu Thr Glu Pro Val Val Leu Thr Phe Gln His Gln	
Human GPR56-3:	Lys Val Ala Asn Leu Thr Glu Pro Val Val Leu Thr Phe Gln His Gln	
Human GPR56-4:	Lys Val Ala Asn Leu Thr Glu Pro Val Val Leu Thr Phe Gln His Gln	
Murine GPR56:	Lys Val <b>Thr</b> Asn Leu <b>Ser Asp</b> Pro Val Val Leu Thr Phe Gln His Gln	330
		325
Human GPR56-1:	Leu Gln Pro Lys Asn Val Thr Leu Gln Cys Val Phe Trp Val Glu Asp	
Human GPR56-2:	Leu Gln Pro Lys Asn Val Thr Leu Gln Cys Val Phe Trp Val Glu Asp	
Human GPR56-3:	Leu Gln Pro Lys Asn Val Thr Leu Gln Cys Val Phe Trp Val Glu Asp	
Human GPR56-4:	Leu Gln Pro Lys Asn Val Thr Leu Gln Cys Val Phe Trp Val Glu Asp	
Murine GPR56:	<b>Pro</b> Gln Pro Lys Asn Val Thr Leu Gln Cys Val Phe Trp Val Glu Asp	340
		345
Human GPR56-1:	Pro Thr Leu Ser Ser Pro Gly His Trp Ser Ser Ala Gly Cys Glu Thr	
Human GPR56-2:	Pro Thr Leu Ser Ser Pro Gly His Trp Ser Ser Ala Gly Cys Glu Thr	
Human GPR56-3:	Pro Thr Leu Ser Ser Pro Gly His Trp Ser Ser Ala Gly Cys Glu Thr	
Human GPR56-4:	Pro Thr Leu Ser Ser Pro Gly His Trp Ser Ser Ala Gly Cys Glu Thr	
Murine GPR56:	<b>Pro Ala Ser</b> Ser Ser <b>Thr Gly Ser</b> Trp Ser Ser Ala Gly Cys Glu Thr	355
		360
Human GPR56-1:	Val Arg Arg Glu Thr Gln Thr Ser Cys Phe Cys Asn His Leu Thr Tyr	
Human GPR56-2:	Val Arg Arg Glu Thr Gln Thr Ser Cys Phe Cys Asn His Leu Thr Tyr	
Human GPR56-3:	Val Arg Arg Glu Thr Gln Thr Ser Cys Phe Cys Asn His Leu Thr Tyr	
Human GPR56-4:	Val Arg Arg Glu Thr Gln Thr Ser Cys Phe Cys Asn His Leu Thr Tyr	
Murine GPR56:	Val <b>Ser</b> Arg <b>Asp</b> Thr Gln Thr Ser Cys <b>Leu</b> Cys Asn His Leu Thr Tyr	375
		370

FIGURE 1f

Human GPR56-1:	Phe	Ala	Val	Leu	Met	Val	Ser	Ser	Val	Glu	Val	Asp	Ala	Val	His	Lys	
Human GPR56-2:	Phe	Ala	Val	Leu	Met	Val	Ser	Ser	Val	Glu	Val	Asp	Ala	Val	His	Lys	
Human GPR56-3:	Phe	Ala	Val	Leu	Met	Val	Ser	Ser	Val	Glu	Val	Asp	Ala	Val	His	Lys	
Human GPR56-4:	Phe	Ala	Val	Leu	Met	Val	Ser	Ser	Val	Glu	Val	Asp	Ala	Val	His	Lys	
Murine GPR56:	Phe	Ala	Val	Leu	Met	Val	Ser	Ser	<b>Thr</b>	Glu	Val	<b>Glu</b>	Ala	<b>Thr</b>	His	Lys	400
																	395
Human GPR56-1:	His	Tyr	Leu	Ser	Leu	Leu	Ser	Tyr	Val	Gly	Cys	Val	Val	Ser	Ala	Leu	
Human GPR56-2:	His	Tyr	Leu	Ser	Leu	Leu	Ser	Tyr	Val	Gly	Cys	Val	Val	Ser	Ala	Leu	
Human GPR56-3:	His	Tyr	Leu	Ser	Leu	Leu	Ser	Tyr	Val	Gly	Cys	Val	Val	Ser	Ala	Leu	
Human GPR56-4:	His	Tyr	Leu	Ser	Leu	Leu	Ser	Tyr	Val	Gly	Cys	Val	Val	Ser	Ala	Leu	
Murine GPR56:	His	Tyr	Leu	<b>Thr</b>	Leu	Leu	Ser	Tyr	Val	Gly	Cys	Val	<b>Ile</b>	Ser	Ala	Leu	415
																	410
Human GPR56-1:	Ala	Cys	Leu	Val	Thr	Ile	Ala	Ala	Tyr	Leu	Cys	Ser	Arg	Val	Pro	Leu	
Human GPR56-2:	Ala	Cys	Leu	Val	Thr	Ile	Ala	Ala	Tyr	Leu	Cys	Ser	Arg	Val	Pro	Leu	
Human GPR56-3:	Ala	Cys	Leu	Val	Thr	Ile	Ala	Ala	Tyr	Leu	Cys	Ser	Arg	Val	Pro	Leu	
Human GPR56-4:	Ala	Cys	Leu	Val	Thr	Ile	Ala	Ala	Tyr	Leu	Cys	Ser	Arg	---	---	---	
Murine GPR56:	Ala	Cys	<b>Val</b>	<b>Phe</b>	Thr	Ile	Ala	Ala	Tyr	Leu	Cys	Ser	Arg	---	---	---	430
																	420
Human GPR56-1:	Pro	Cys	Arg	Arg	Lys	Pro	Arg	Asp	Tyr	Thr	Ile	Lys	Val	His	Met	Asn	
Human GPR56-2:	Pro	Cys	Arg	Arg	Lys	Pro	Arg	Asp	Tyr	Thr	Ile	Lys	Val	His	Met	Asn	
Human GPR56-3:	Pro	Cys	Arg	Arg	Lys	Pro	Arg	Asp	Tyr	Thr	Ile	Lys	Val	His	Met	Asn	
Human GPR56-4:	---	---	---	---	Arg	Lys	Pro	Arg	Asp	Tyr	Thr	Ile	Lys	Val	His	Met	Asn
Murine GPR56:	---	---	---	---	Arg	Lys	<b>Ser</b>	Arg	Asp	Tyr	Thr	Ile	Lys	Val	His	Met	Asn
																	440
																	435

FIGURE 1g

Human GPR56-1: Leu Leu Leu Ala Val Phe Leu Leu Asp Thr Ser Phe Leu Leu Ser Ser Glu  
Human GPR56-2: Leu Leu Leu Ala Val Phe Leu Leu Asp Thr Ser Phe Leu Leu Ser Ser Glu  
Human GPR56-3: Leu Leu Leu Ala Val Phe Leu Leu Asp Thr Ser Phe Leu Leu Ser Ser Glu  
Human GPR56-4: Leu Leu Leu Ala Val Phe Leu Leu Asp Thr Ser Phe Leu Leu Ser Ser Glu  
Murine GPR56: Leu Leu Ser Ala Val Phe Leu Leu Asp Val Ser Phe Leu Leu Ser Ser Glu  
450 455 460

Human GPR56-1: Pro Val Ala Leu Thr Gly Ser Glu Ala Gly Cys Arg Ala Ser Ala Ile  
Human GPR56-2: Pro Val Ala Leu Thr Gly Ser Glu Ala Gly Cys Arg Ala Ser Ala Ile  
Human GPR56-3: Pro Val Ala Leu Thr Gly Ser Glu Ala Gly Cys Arg Ala Ser Ala Ile  
Human GPR56-4: Pro Val Ala Leu Thr Gly Ser Glu Ala Gly Cys Arg Ala Ser Ala Ile  
Murine GPR56: Pro Val Ala Leu Thr Gly Ser Glu Ala Ala Cys Arg Thr Ser Ala Met  
465 470 475 480

Human GPR56-1: Phe Leu His Phe Ser Leu Leu Thr Cys Leu Ser Trp Met Gly Leu Glu  
Human GPR56-2: Phe Leu His Phe Ser Leu Leu Thr Cys Leu Ser Trp Met Gly Leu Glu  
Human GPR56-3: Phe Leu His Phe Ser Leu Leu Thr Cys Leu Ser Trp Met Gly Leu Glu  
Human GPR56-4: Phe Leu His Phe Ser Leu Leu Thr Cys Leu Ser Trp Met Gly Leu Glu  
Murine GPR56: Phe Leu His Phe Ser Leu Leu Ala Cys Leu Ser Trp Met Gly Leu Glu  
485 490 495

Human GPR56-1: Gly Tyr Asn Leu Tyr Arg Leu Val Val Glu Val Phe Gly Thr Tyr Val  
Human GPR56-2: Gly Tyr Asn Leu Tyr Arg Leu Val Val Glu Val Phe Gly Thr Tyr Val  
Human GPR56-3: Gly Tyr Asn Leu Tyr Arg Leu Val Val Glu Val Phe Gly Thr Tyr Val  
Human GPR56-4: Gly Tyr Asn Leu Tyr Arg Leu Val Val Glu Val Phe Gly Thr Tyr Val  
Murine GPR56: Gly Tyr Asn Leu Tyr Arg Leu Val Val Glu Val Phe Gly Thr Tyr Val  
500 505 510

FIGURE 1h



Human GPR56-1:	Pro Gly Tyr Leu Leu Lys Leu Ser Ala Met Gly Trp Gly Phe Pro Ile	
Human GPR56-2:	Pro Gly Tyr Leu Leu Lys Leu Ser Ala Met Gly Trp Gly Phe Pro Ile	
Human GPR56-3:	Pro Gly Tyr Leu Leu Lys Leu Ser Ala Met Gly Trp Gly Phe Pro Ile	
Human GPR56-4:	Pro Gly Tyr Leu Leu Lys Leu Ser Ala Met Gly Trp Gly Phe Pro Ile	
Murine GPR56:	Pro Gly Tyr Leu Leu Lys Leu Ser <b>Ile Val</b> Gly Trp Gly Phe Pro <b>Val</b>	525
		515
Human GPR56-1:	Phe Leu Val Thr Leu Val Ala Leu Val Asp Val Asp Asn Tyr Gly Pro	
Human GPR56-2:	Phe Leu Val Thr Leu Val Ala Leu Val Asp Val Asp Asn Tyr Gly Pro	
Human GPR56-3:	Phe Leu Val Thr Leu Val Ala Leu Val Asp Val Asp Asn Tyr Gly Pro	
Human GPR56-4:	Phe Leu Val Thr Leu Val Ala Leu Val Asp Val Asp Asn Tyr Gly Pro	
Murine GPR56:	Phe Leu Val Thr Leu Val Ala Leu Val Asp Val Asp Asn Tyr Gly Pro	530
		535
Human GPR56-1:	Ile Ile Leu Ala Val His Arg Thr Pro Glu Gly Val Ile Tyr Pro Ser	
Human GPR56-2:	Ile Ile Leu Ala Val His Arg Thr Pro Glu Gly Val Ile Tyr Pro Ser	
Human GPR56-3:	Ile Ile Leu Ala Val His Arg Thr Pro Glu Gly Val Ile Tyr Pro Ser	
Human GPR56-4:	Ile Ile Leu Ala Val His Arg Thr Pro Glu Gly Val Ile Tyr Pro Ser	
Murine GPR56:	Ile Ile Leu Ala Val <b>Arg</b> Arg Thr Pro Glu <b>Arg</b> Val <b>Thr</b> Tyr Pro Ser	540
		550
Human GPR56-1:	Met Cys Trp Ile Arg Asp Ser Leu Val Ser Tyr Ile Thr Asn Leu Gly	
Human GPR56-2:	Met Cys Trp Ile Arg Asp Ser Leu Val Ser Tyr Ile Thr Asn Leu Gly	
Human GPR56-3:	Met Cys Trp Ile Arg Asp Ser Leu Val Ser Tyr Ile Thr Asn Leu Gly	
Human GPR56-4:	Met Cys Trp Ile Arg Asp Ser Leu Val Ser Tyr <b>Val</b> Thr Asn Leu Gly	575
Murine GPR56:	Met Cys Trp Ile Arg Asp Ser Leu Val Ser Tyr <b>Val</b> Thr Asn Leu Gly	565

FIGURE 1i

Human GPR56-1:	Leu Phe Ser Leu Val Phe Leu Phe Asn Met Ala Met Leu Ala Thr Met	
Human GPR56-2:	Leu Phe Ser Leu Val Phe Leu Phe Asn Met Ala Met Leu Ala Thr Met	
Human GPR56-3:	Leu Phe Ser Leu Val Phe Leu Phe Asn Met Ala Met Leu Ala Thr Met	
Human GPR56-4:	Leu Phe Ser Leu Val Phe Leu Phe Asn Met Ala Met Leu Ala Thr Met	
Murine GPR56:	Leu Phe Ser Leu Val Phe Leu Phe Asn <b>Leu</b> Ala Met Leu Ala Thr Met	580
		590
Human GPR56-1:	Val Val Gln Ile Leu Arg Leu Arg Pro His Thr Gln Lys Trp Ser His	
Human GPR56-2:	Val Val Gln Ile Leu Arg Leu Arg Pro His Thr Gln Lys Trp Ser His	
Human GPR56-3:	Val Val Gln Ile Leu Arg Leu Arg Pro His Thr Gln Lys Trp Ser His	
Human GPR56-4:	Val Val Gln Ile Leu Arg Leu Arg Pro His Thr Gln Lys Trp Ser His	
Murine GPR56:	Val Val Gln Ile Leu Arg Leu Arg Pro His <b>Ser</b> Gln <b>Asn</b> Trp <b>Pro</b> His	595
		600
		605
Human GPR56-1:	Val Leu Thr Leu Leu Gly Leu Ser Leu Val Leu Gly Leu Pro Trp Ala	
Human GPR56-2:	Val Leu Thr Leu Leu Gly Leu Ser Leu Val Leu Gly Leu Pro Trp Ala	
Human GPR56-3:	Val Leu Thr Leu Leu Gly Leu Ser Leu Val Leu Gly Leu Pro Trp Ala	
Human GPR56-4:	Val Leu Thr Leu Leu Gly Leu Ser Leu Val Leu Gly Leu Pro Trp Ala	
Murine GPR56:	Val Leu Thr Leu Leu Gly Leu Ser Leu Val Leu Gly Leu Pro Trp Ala	610
		615
		620
Human GPR56-1:	Leu Ile Phe Phe Ser Phe Ala Ser Gly Thr Phe Gln Leu Val Val Leu	
Human GPR56-2:	Leu Ile Phe Phe Ser Phe Ala Ser Gly Thr Phe Gln Leu Val Val Leu	
Human GPR56-3:	Leu Ile Phe Phe Ser Phe Ala Ser Gly Thr Phe Gln Leu Val Val Leu	
Human GPR56-4:	Leu Ile Phe Phe Ser Phe Ala Ser Gly Thr Phe Gln Leu Val Val Leu	
Murine GPR56:	Leu <b>Val</b> Phe Phe Ser Phe Ala Ser Gly Thr Phe Gln Leu Val <b>Ile</b> Leu	630
		635
		640

FIGURE 1j

Human GPR56-1: Tyr Leu Phe Ser Ile Ile Thr Ser Phe Gln Gly Phe Leu Ile Phe Ile  
Human GPR56-2: Tyr Leu Phe Ser Ile Ile Thr Ser Phe Gln Gly Phe Leu Ile Phe Ile  
Human GPR56-4: Tyr Leu Phe Ser Ile Ile Thr Ser Phe Gln Gly Phe Leu Ile Phe Ile  
Human GPR56-5: Tyr Leu Phe Ser Ile Ile Thr Ser Phe Gln Gly Phe Leu Ile Phe Ile  
Murine GPR56: Tyr Leu Phe Ser Ile Ile Thr Ser **Tyr** Gln Gly Phe Leu Ile Phe **Leu**  
645 650 655

Human GPR56-1: Trp Tyr Trp Ser Met Arg Leu Gln Ala Arg Gly Gly Pro Ser Pro Leu  
Human GPR56-2: Trp Tyr Trp Ser Met Arg Leu Gln Ala Arg Gly Gly Pro Ser Pro Leu  
Human GPR56-3: Trp Tyr Trp Ser Met Arg Leu Gln Ala Arg Gly Gly Pro Ser Pro Leu  
Human GPR56-4: Trp Tyr Trp Ser Met Arg Leu Gln Ala Arg Gly Gly Pro Ser Pro Leu  
Murine GPR56: Trp Tyr Trp Ser Met Arg **Phe** Gln Ala **Gln** Gly Gly Pro Ser Pro Leu  
660 665 670

Human GPR56-1: Lys Ser Asn Ser Asp Cys Ala Arg Leu Pro Ile Ser Ser Gly Ser Thr  
Human GPR56-2: Lys Ser Asn Ser Asp Ser Ala Arg Leu Pro Ile Ser Ser Gly Ser Thr  
Human GPR56-3: Lys Ser Asn Ser Asp Ser Ala Arg Leu Pro Ile Ser Ser Gly Ser Thr  
Human GPR56-4: Lys Ser Asn Ser Asp Ser Ala Arg Leu Pro Ile Ser Ser Gly Ser Thr  
Murine GPR56: Lys **Asn** Asn Ser Asp Ser Ala **Lys** Leu Pro Ile Ser Ser Gly Ser Thr  
675 680 685

Human GPR56-1: Ser Ser Ser Arg Ile  
Human GPR56-2: Ser Ser Ser Arg Ile  
Human GPR56-3: Ser Ser Ser Arg Ile  
Human GPR56-4: Ser Ser Ser Arg Ile  
Murine GPR56: Ser Ser Ser Arg Ile  
690

FIGURE 1K

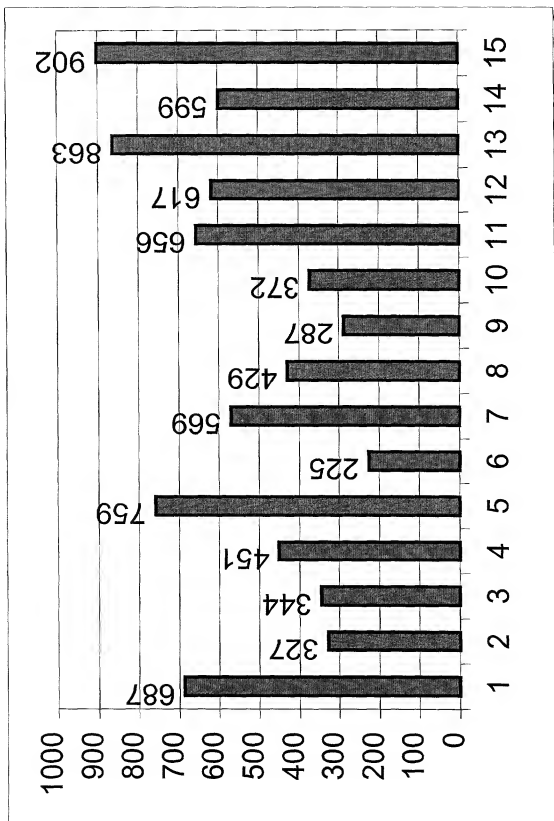


FIGURE 2a

13/15

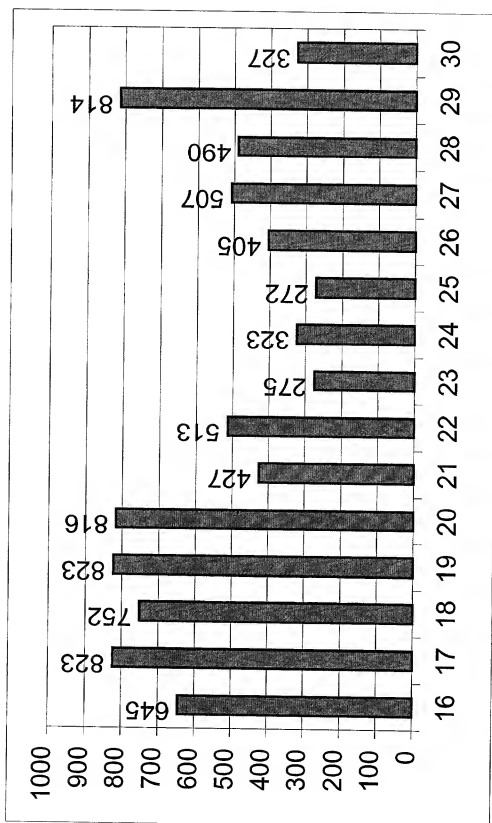


FIGURE 2b

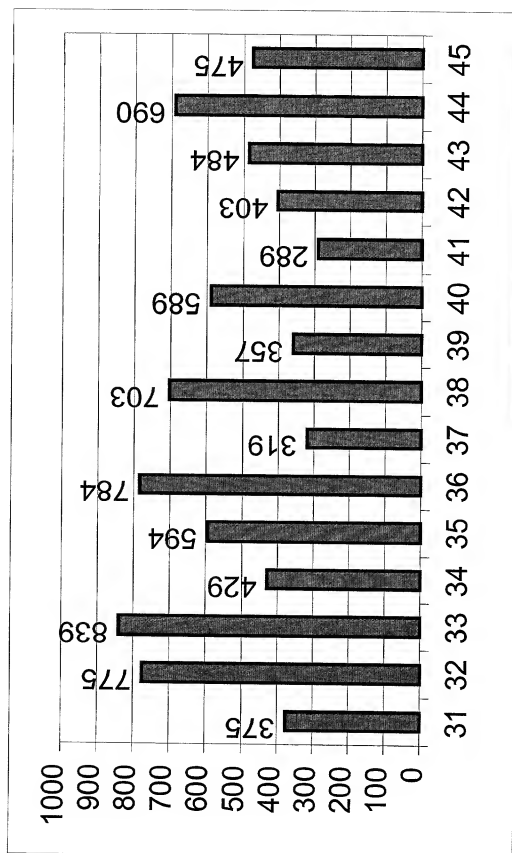


FIGURE 2c

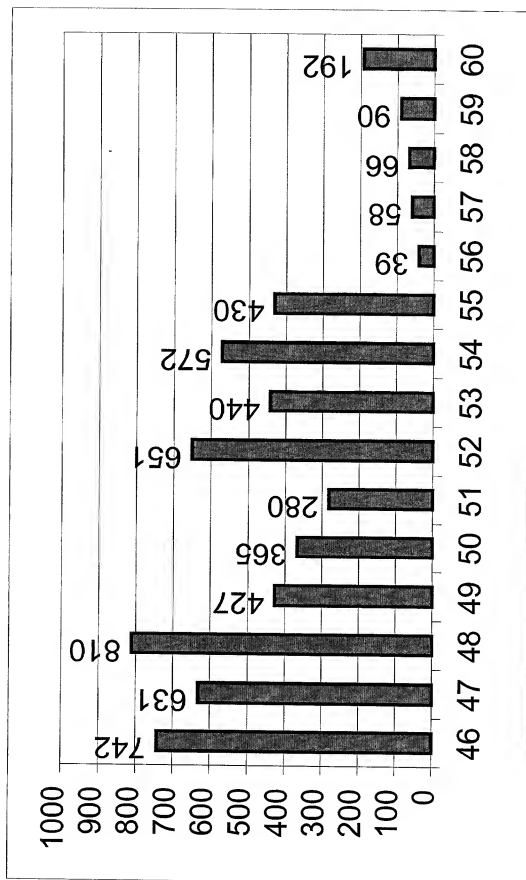


FIGURE 2d